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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,402	07/18/2003	Michael R. Schwarz	CS-7890	4637
3446/ 7590 03/18/2011 BAYER CROPSCIENCE LP Patent Department 2 T. W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709				
EXAMINER CLAYTOR, DEIRDRE RENEE				
ART UNIT		PAPER NUMBER		
1627				
NOTIFICATION DATE		DELIVERY MODE		
03/18/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

blair.wilson@bayercropsience.com
pamula.ramsey@bayercropsience.com
destiny.davenport@bayercropsience.com

Office Action Summary**Application No.**

10/623,402

Applicant(s)

SCHWARZ, MICHAEL R.

Examiner

RENEE CLAYTOR

Art Unit

1627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-912)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/2011 has been entered.

Response to Arguments

Applicants present arguments over the 35 USC 103 rejection over Turnblad (US Patent 5,876,739) in view of Senn et al. (WO 01/26468) and Szczepanski et al. (US Patent 4,523,947). In particular, Applicants argue that Turnblad is directed to an insecticidal coating that reduces the phytotoxicity of the insecticide on the seed. It is then argued that Senn does not suggest a reason to select and use the compounds described in the reference, combine them with the optional herbicides of Turnblad and use them in the method as claimed. Applicants further argue that Szczepanski does not teach or suggest that triazines or chloroacetamides should be selected from the numerous categories of optional herbicides mentioned in Turnblad. Applicants also claim unexpected results of the combination of the present invention and point out the results in the specification.

In response to the above arguments, it is noted that Turnblad teaches an insecticidal coating for a seed comprising an insecticide which is preferably imidacloprid (Col. 1, lines 28-39; Col. 4, lines 14-37). Turnblad further teaches that in addition to the insecticidal coating layer, the seed may be treated with other pesticides including herbicides (Col. 6, lines 39-41) which include chloroacetamides and triazines (Col. 7, lines 3-5). It is recognized that Turnblad does not specify that the reduction of phytotoxicity to corn is produced by herbicide application. However, Turnblad does teach the desirability of providing an insecticide and herbicide treatment together and an exemplification of every embodiment does not have to be taught in the reference to qualify as prior art.

It is noted that the Senn reference was used for the specific teaching that the compounds thiamethoxam or imidacloprid can be applied directly to the seed and the usefulness of this and the rate of application. In addition, Szczeoanski teaches a method of treating maize plants or seeds by the use of compounds of formula I, which are triazine derivatives, and that the treatment can be carried out before, simultaneously with or after the application of the herbicide (Col. 5, lines 46-55; Col. 6, lines 23-25 and 43-46). As taught in the abstract, the triazine derivatives are used for the protection of maize against the harmful effects of herbicidal compositions. Therefore, Szczeoanski teaches that herbicidal composition such as chloroacetamides cause phytotoxicity and the desirability of providing an insecticide to combat the phytotoxicity.

Due to Applicants amendments to the claims, please see the following modified grounds of rejection.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Szczepanski et al. (US Patent 4,523,947) in view of Turnblad et al. (US Patent 5,876,739) and Senn et al. (WO 01/26468).

Szczepanski et al. teaches a method of protecting maize (corn) plants against the harmful effects of herbicidal chloroacetanilides and chloroacetamides (see Col. 1, lines 5-22). Szczepanski et al. teaches a method of protection of maize plants by treating the maize plants, the seed of the plants or the soils intended for cultivation of maize with a triazine compound before, simultaneously with or after the application of the herbicide (reading on administration of the insecticide before the herbicide in claim 1 and pre-emergent and post-emergent treatments of the herbicide; Col. 5, lines 46-55). Example 44 teaches the administration of a chloroacetanilide as a pre-emergent treatment (meeting the limitation of claim 25).

Szczepanski et al. does not teach minimizing injury to corn caused by herbicide treatment by application of a chloronicotinyl insecticide or the application rate of the chloronicotinyl insecticide.

Turnblad et al. teaches insecticidal coating for a seed comprising an effective amount of an insecticide and among the insecticides listed include imidacloprid (Col. 1,

lines 29-36; Col. 4, lines 14-37) and thiamethoxam (Col. 4, lines 66-67 – Col. 5, lines 1-10 or Formula II). In addition to the insecticidal coating layer, the seed may be treated with other herbicides of which include chloroacetamides and triazines, which can be added in another layer (Col. 6, lines 39-42; Col. 7, lines 3-6). The insecticidal coating on the seed is effective against insect pests without causing phytotoxicity to the seed (Col. 2, lines 45-50). Particular crop seeds that can be treated according to the invention include corn (also known as maize; Col. 5, lines 65-67 – Col. 6, lines 1-3).

Senn et al. teach a method of improving the growth of plants comprising applying to the locus a compound of Formula Ia (thiamethoxam) or imidacloprid (page 3, second full paragraph). Crops that can be improved according to the method include maize (corn; page 5, first full paragraph). Senn et al. also teaches that the compositions are suitable for the treatment of plant seeds (see second full paragraph on page 8). Senn et al. teaches that the compositions can provide pesticidal activity in addition to enhancing plant growth (see page 4). Senn et al. teaches that favorable rates of application are in the range of 0.0005 to not more than 1 kg per 100 kg of material to be protected (see page 8, last paragraph).

Accordingly, it would be obvious to a person of ordinary skill in the art to use a combination treatment of an insecticide such as imidacloprid or thiamethoxam with herbicides such as triazines and chloroacetamides as taught by Szczepanski et al. and Turnblad et al. because Szczepanski et al. teaches that herbicides such as chloroacetamides cause harmful effects to corn plants and seeds and Turnblad et al. teaches that a chloronicotinyl insecticide and chloroactamide can be administered

together to reduce phytotoxicity to corn plants and seeds. In addition, it would be obvious to include the teachings of Senn et al. because it is closely related art to Turnblad et al. and teaches a rate of application of the chloronicotinyl insecticide. One would be motivated to use a chloronicotinyl insecticide in the method of Szczepanski et al. because Turnblad et al. teaches that a chloronicotinyl insecticide can be administered with a chloroacetimide to minimize phytotoxicity to a corn seed or plant.

It is noted that Senn et al. teach that the insecticide can be applied at a rate of application of from 0.0005 to 1 kg per 1 kg of material to be protected. Furthermore, it is obvious to vary and/or optimize the amount of insecticide provided in the composition, according to the guidance provided by Senn et al., to provide a composition having the desired properties such as the desired concentrations to the seed. As Senn et al. discusses on the last paragraph of page 8 spanning into page 9, the application conditions depend essentially on the nature of the material and on its environmental factors and one would be able to determine which doses are non-phytotoxic. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding the limitation of the soil temperature being from about 4°C to about 25 °C, Senn et al. and Szczepanski et al. teach application of the compositions to the soil at the plant locus as discussed above, and accordingly it is considered that one of ordinary skill in the art at the time of the invention was made would have found it obvious to apply the composition to soil at the native or outdoors temperature of the soil,

including temperatures from 4°C to about 25 °C, with the expectation of achieving insecticidal effects as well as reduction in phytotoxicity. It is noted that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Conclusion

No claims are allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RENEE CLAYTOR whose telephone number is (571)272-8394. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Renee Claytor/
Examiner, Art Unit 1627